



Corrigendum

Corrigendum to “Equivalent circuit model parameters of a high-power Li-ion battery: Thermal and state of charge effects” [J. Power Sources 196 (10) (2011) 4826–4831]

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The authors regret some errors that appeared in Eqs. (10–13) in the above mentioned article. We would like to replace the equations provided to account for the influence of temperature and SOC on R_{ct} , R_s , Y_{013} and Z_{eq} with the following equations, respectively:

$$R_{ct}(R^2 = 0.975) = 39.5234 + 3.5 \times \text{SOC} - 0.24789 \times T + 4.422e^{-2} \times \text{SOC}^2 + 3.892e^{-4} \times T^2 - 1.1087e^{-2} \times \text{SOC} \times T \quad [10]$$

$$\begin{aligned} R_s(R^2 = 0.951) = & 5.0289562 - 1.4169951 \times \text{SOC} - 4.5839388e^{-2} \times T - 6.4130319e^{-2} \times \text{SOC}^2 + 1.4184268e^{-4} \times T^2 \\ & + 9.4748961e^{-3} \times \text{SOC} \times T + 2.513733e^{-2} \times \text{SOC}^3 - 1.4666667e^{-7} \times T^3 - 1.5534759e^{-5} \times T^2 \times \text{SOC} \\ & + 6.2732438e^{-5} \times \text{SOC}^2 \times T \end{aligned} \quad [11]$$

$$\begin{aligned} Y_{013}(R^2 = 0.973) = & 1.198301e^5 - 1.1720148e^3 \times T + 1.2145192e^3 \times \text{SOC} + 3.8150258 \times T^2 + 94.561182 \times \text{SOC}^2 - 7.7359396 \\ & \times \text{SOC} \times T - 4.1306667e^{-3} \times T^3 - 111.24352 \times \text{SOC}^3 + 0.16673554 \times \text{SOC}^2 \times T + 1.15187e^{-2} \times T^2 \times \text{SOC} \end{aligned} \quad [12]$$

$$\begin{aligned} Z_{eq}(R^2 = 0.951) = & 4.2218764 - 0.10219224 \times \text{SOC} - 2.4888709e^{-2} \times T - 1.5371637e^{-2} \times \text{SOC}^2 + 3.744699e^{-5} \times T^2 \\ & + 4.0803952e^{-4} \times \text{SOC} \times T \end{aligned} \quad [13]$$

The confidence intervals for the predictions are $R_{ct} \pm 0.03$, $R_s \pm 0.0012$, $Y_{013} \pm 4.94$, and $Z_{eq} \pm 0.005$, respectively. All the values predicted in Table 1 fall within the ranges predicted by the corrected equations. We apologize to the reader for this inconvenience.

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